

No. 14-1047

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

HITACHI CONSUMER ELECTRONICS CO., LTD. and HITACHI ADVANCED
DIGITAL, INC.,

Plaintiffs-Appellants,

v.

TOP VICTORY ELECTRONICS (TAIWAN) CO., LTD., TPV INTERNATIONAL
(USA), INC., ENVISION PERIPHERALS, INC., TOP VICTORY ELECTRONICS
(FUJIAN) CO. LTD., TPV ELECTRONICS (FUJIAN) CO. LTD., and TPV
TECHNOLOGY LTD.,

Defendants-Appellees.

Appeal from the United States District Court for the Eastern District of Texas,
Marshall Division in Case No. 2:10-CV-260, Hon. Rodney Gilstrap

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FORM 9. Certificate of Interest

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

Hitachi Consumer Electronics v. Top Victory Electronics

No. 14-1047

CERTIFICATE OF INTEREST

Counsel for the (petitioner) (appellant) (respondent) (appellee) (amicus) (name of party)

Appellees certifies the following (use "None" if applicable; use extra sheets if necessary):

1. The full name of every party or amicus represented by me is:

TOP VICTORY ELECTRONICS (TAIWAN) CO., LTD., TPV INTERNATIONAL (USA), INC., ENVISION PERIPHERALS, INC., TOP VICTORY ELECTRONICS (FUJIAN) CO. LTD., TPV ELECTRONICS (FUJIAN) CO. LTD., and TPV TECHNOLOGY LTD.

2. The name of the real party in interest (if the party named in the caption is not the real party in interest) represented by me is:

Not applicable

3. All parent corporations and any publicly held companies that own 10 percent or more of the stock of the party or amicus curiae represented by me are:

Top Victory Investments Ltd is the parent corporation of 1) TPV Electronics (Fujian); 2) Top Victory Electronics (Fujian); 3) Top Victory Electronics (Taiwan); and 4) TPV International (USA). Envision Peripherals has no parent corporation. No publicly held corporation owns 10 percent or more of any of the parties represented by me.

4. ☒ The names of all law firms and the partners or associates that appeared for the party or amicus now represented by me in the trial court or agency or are expected to appear in this court are:

Mark Samuels, Brian Berliner, Vision Winter, Jordan Raphael, Nicholas Whilt, John Woo Kyunghoon, Michael Myers, Soyoung Jung, Elizabeth Klein (O'Melveny & Myers); Deron Dacus (The Dacus Firm, P.C.); Todd Landis, Eric Klein, Daniel Moffett (Akin Gump Strauss Hauer & Feld LLP); William Cornelius, Jennifer Ainsworth (Wilson Robertson & Cornelius)

April 14, 2014

Date

/s/ Jonathan D. Hacker

Signature of counsel

Jonathan D. Hacker

Printed name of counsel

Please Note: All questions must be answered

cc: _____

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STATEMENT OF RELATED CASES

Counsel for appellees Top Victory Electronics (Taiwan) Co. Ltd., TPV International (USA), Inc., Envision Peripherals, Inc., Top Victory Electronics (Fujian) Co. Ltd., and TPV Technology Ltd. (collectively, “TPV”) certifies that no other appeal in or from the same civil action in the lower court was previously before this or any other appellate court. Counsel further certifies that there is no other case known to counsel to be pending in any court that will directly affect or be directly affected by this Court’s decision in the pending appeal.

JURISDICTIONAL STATEMENT

Appellants’ jurisdictional statement is correct. This Court has jurisdiction under 28 U.S.C. § 1295.

INTRODUCTION

This dispute arises from a 2010 complaint filed by Hitachi Consumer Electronics Co., Ltd. and Hitachi Advanced Digital, Inc. (collectively, “Hitachi”), alleging that televisions manufactured by TPV infringed certain Hitachi patents. At trial, TPV established that the four patents at issue were not infringed and that two of them were invalid because they were anticipated or rendered obvious by DigiCipher, a highly-touted, industry-changing digital television system developed and disclosed by General Instrument (“GI”). After a five-day trial, a jury ruled for TPV across the board.

Hitachi now challenges that verdict, mainly on sufficiency-of-the-evidence grounds, but it consistently fails to acknowledge evidence and inferences supporting the jury's findings. On the actual evidentiary and legal record, the verdict is amply supported and must be sustained.

Under 35 U.S.C. § 102(a), a patent is invalid if it claims an invention that was either "known by others" or "described in a printed publication" before its priority date. It is now undisputed that GI's preexisting DigiCipher system embodied every limitation in the asserted claims of the '310 and '375 patents, and TPV established at trial that the preexisting system was both known by others and described in a printed publication before the priority date of Hitachi's patents claiming the same system. The record below showed that GI's celebrated new system was widely known to GI employees and outside contractors, as well as to other interested members of the public who participated in an outside panel convened by the FCC to determine whether the DigiCipher system should be used as a new public broadcast standard for all digital televisions. The record also showed, importantly, that GI made no effort whatsoever to keep the system secret, instead touting it in press releases. Under this Court's precedents, GI's decision to treat the DigiCipher system as nonconfidential suffices to invalidate the patents Hitachi later sought for the same system.

Hitachi's sufficiency challenge focuses on the extent of public access to the DigiCipher document itself, largely ignoring the record evidence establishing, without meaningful contradiction by Hitachi, that knowledge of the *underlying DigiCipher technology* was available to the public before July 20, 1990. Hitachi thus completely misses the point in complaining that one TPV witness could not identify the exact date on which the DigiCipher document itself was distributed to the "public": the issue is not exactly when and to whom the document was disseminated, but whether *knowledge of the inventions claimed in Hitachi's patents* was available to people *outside Hitachi* before July 20, 1990. Whatever was true of the DigiCipher document itself, the incontrovertible fact is that *many* people outside Hitachi already had knowledge of the same technology Hitachi later sought to patent, and they were under no obligation to GI, DigiCipher's creator, to keep it secret. That record compels invalidation of Hitachi's patents.

The record also included substantial evidence establishing that TPV's products did not infringe the asserted claims. Hitachi's contrary argument comes to little more than a complaint that jurors should not have found the testimony of TPV's experts credible and persuasive. But they did, because the testimony of TPV's experts was substantially more credible and persuasive than the testimony of Hitachi's experts. Hitachi does not challenge TPV's experts as unqualified, nor does it challenge their opinions as unreliable and hence inadmissible. Nothing

Hitachi argues on appeal establishes that jurors acted unreasonably in relying on the testimony of TPV's reliable and qualified experts to reject Hitachi's infringement case. Nor is there merit to Hitachi's contention that the non-infringement verdict was improperly affected by the DigiCipher evidence concerning invalidity—what mattered to the infringement case was the disagreement among experts, which jurors reasonably and appropriately resolved in TPV's favor.

That factual resolution is no more subject to legitimate contest on appeal than jurors' resolution of the credibility issues and factual determinations essential to the invalidity finding. Every point Hitachi raises on appeal, in short, was a matter for jurors to decide, and Hitachi cites no legal ground for reversing their decision. The judgment should be affirmed.

STATEMENT OF ISSUES

1. Whether jurors had sufficient evidence to conclude that the asserted claims of the '310 and '375 patents are invalid because they were either already "known by others" or "described in a printed publication" by the patents' priority date, where GI employees had previously developed the same technology in the form of DigiCipher, which GI publicized in press releases, and shared, with no confidentiality restrictions, with all GI employees, outside contractors, and an FCC panel of outside experts.

2. Whether jurors had sufficient evidence to conclude that any of three separate limitations in each of the asserted claims of the '310 and '375 patents were not met, and therefore that the claims were not infringed.

3. Whether jurors had sufficient evidence to conclude that the asserted claims of the '243 patent were not infringed.

4. If the Court determines that DigiCipher was not prior art, whether Hitachi can demonstrate that DigiCipher's admission substantially impacted the jury's non-infringement verdict.

STATEMENT OF THE CASE

A. Factual Background

TPV largely agrees with Hitachi's exhaustive explanation of modern digital television and broadcasting technology, including especially the basics of high-definition television technology. Hitachi Br. 5-12. TPV confines itself to factual points directly pertinent to the issues on appeal. And unlike Hitachi, but in accordance with the requirements of appellate review, TPV sets forth the facts in the light most favorable to the verdict, indulging all reasonable inferences in TPV's favor. *See infra* at 19-20.

1. TPV's Relationship To Hitachi

TPV designs and manufactures televisions (as well as computer monitors and other electronics) that its customers—including companies such as Phillips,

Sanyo, Sharp, Panasonic, and even Hitachi itself—sell under their own brands.

See A8743, A8749-A8750. TPV’s customers had sold its televisions in the United States for more than five years before Hitachi first made contact in April 2009 and suggested that TPV needed a license for its long-marketed products. *See* A8748; A8032-A8033.

2. *The ATSC Standard And The Pathbreaking DigiCipher System*

Hitachi’s infringement case as to the ’310 and ’375 patents rests on the premise that its patents are essential to the Advanced Television Systems Committee (“ATSC”) standard for over-the-air broadcast of high definition television. Hitachi essentially argues that because those patents are (supposedly) essential to the standard, televisions that comply with the standard—like TPV’s—necessarily are infringing. A9671 (Hitachi post-trial motion: “infringement was predicated on compliance with the ATSC standard”). The ATSC standard relies on digital signal processing technology, in which data is represented in a series of 0s and 1s, known as bits.

The ATSC standard prescribes a particular method for broadcasting and receiving over-the-air digital television signals. A11098. It resulted from efforts the FCC began in 1987, when the agency fielded and tested proposals for a uniform high-definition broadcast television standard. *See* A11087; A8831. Proposals submitted to the FCC were reviewed by bodies known as

“working parties,” comprising experts and other members of the public interested in the field, who were responsible for assessing the submission’s viability to serve as a standard. A8798-A8799. The aim was to develop a standard that could broadcast higher quality television signals over existing frequency bands already allocated for lower quality analog signals.

Early proposals focused primarily on getting more out of the pre-existing analog signal technology. A8831. Everything changed in June 1990, when GI submitted the first proposal for an all-digital system, which it called DigiCipher. A8831, A8893. Thereafter, several other groups of companies submitted competing all-digital proposals to the committee. A8893. In 1993, those groups joined forces at the FCC’s request, in what became known as the Grand Alliance, to produce an ideal digital system. A11087-A11088; A8804-A8805; A8894. That group produced the ATSC standard. A11087-A11088; *see* A8894-A8895.

Under the ATSC standard, video and audio signals to be broadcast are first compressed and encoded in bit form. A8897. That data is then arranged in packets, which are combined into a single transport stream in a process called multiplexing. A11085. The data stream is then randomized according to a particular algorithm that can be reversed in the receiver. A11102. At that point, a first error-correction method called Reed-Solomon encoding is performed.

A11102-A11103. The data is then rearranged in a process called interleaving, A11103, A8911, and a second error-correction process called trellis encoding is performed on the interleaved data, A11104. The data is then modulated, meaning it is converted into an analog format that can be transmitted over the airwaves, and sent on its way. A8898, A8903. When the signal is received, the digital data is recovered by essentially reversing this process, beginning with demodulation and ending with expansion by so-called bit-expanders so that picture and audio can be displayed.

A critical feature of the ATSC standard is its use of error correction, which generally encompasses numerous methods that can be used to protect a digital broadcast signal from interference caused by, for example, mountains, buildings, or lightning. A8899-A8900. As noted, the ATSC standard mandates two types of error correction, which operate in fundamentally different ways. The first process—Reed-Solomon encoding—operates on separate underlying blocks of data; based on the arrangement of 0s and 1s in that data, Reed-Solomon encoding generates and appends additional data to provide redundancy. A11102-11103. The second error correction process—trellis encoding—is designed to operate on each two-bit pair of data and replace it with three bits. A11104. The main difference between Reed-Solomon encoding and trellis encoding is that the latter involves operating on and replacing the underlying bits with an entirely new set of

bits, rather than simply appending an additional packet of error correction data to the preexisting bits. A11104; A8909-A8910; A8913.

3. The '310 And '375 Patents

Because TPV's televisions comply with the foregoing ATSC standard, Hitachi accused 242 models of infringing claim 7 of the '310 patent and claims 26 and 30 of the '375 patent. The asserted claims of the '310 and '375 patents are substantially similar—the two patents share an identical specification and claim priority to a common parent—and, in general terms, relate to a digital receiver designed to receive and display digital audio and video information. The primary embodiment of the claimed invention, reflected in the specification and every figure of the patents, is a video-tape recorder (VTR). A945; A8915. The word “television” does not appear anywhere in either patent, and there is no suggestion that the claimed receiver would function for digital television as opposed to a recording and reproduction system for VTRs. A925-A954; A956-A987; A8920 (“Every figure in this patent has a tape head for recording or playback.... There's no suggestion it's applicable to a television signal or even a hint.”); A8360 (Hitachi's expert: “[e]very figure in the patent includes something about a tape-recorder”). The priority date of both patents is June 20, 1990. A146.

4. Prior Knowledge Of The System Claimed In The Patents

It is no longer disputed here that GI's groundbreaking DigiCipher system embodied every element of the asserted claims of the '310 and '375 patents. At trial, a TPV expert testified that the technology described in the patents is "identical" to the preexisting DigiCipher system "in terms of critical functions." A8957. The parties agreed that the DigiCipher system includes every element of claim 7 of the '310 patent (A146), and the jury found (in a portion of its verdict Hitachi does not challenge on appeal) that claims 26 and 30 of the '375 patent, despite having one limitation not directly disclosed by DigiCipher, would have been obvious in light of GI's system (A148-A149). Hitachi's sole appellate challenge to the invalidity verdict for both patents is that while GI employees outside Hitachi concededly invented the same system Hitachi later sought to patent, the system was somehow not "known by others" outside Hitachi, as required for a valid patent under 35 U.S.C. § 102(a).

Not only were the GI employees who invented DigiCipher obviously aware of the system Hitachi would later try to claim, but the system was shared with other members of the interested public before the critical date, with no expectation whatsoever that the information was to be treated as confidential. A GI document titled "DIGICIPHER HDTV SYSTEM" describes the technology in detail and bears a date of June 8, 1990. A16841. Although GI had a practice of designating

certain proprietary documents and information confidential, it did not do so for the DigiCipher document. A8817-A8818. To the contrary, GI *publicly touted its development of the DigiCipher system in press releases*. A8818. And the details of DigiCipher, as well as the document describing it, were shared openly with all GI employees and with outside contractors. A8819; A8822. GI also submitted the DigiCipher system to the FCC in early June 1990, A8333; A8822, where it was presented to the members of an outside working party (*see supra* at 6-7) tasked with evaluating whether it should be used in the forthcoming public standard for broadcast televisions, A8798-A8800. As discussed above, GI's submission of the DigiCipher system to the FCC changed the landscape industry-wide, as other groups of companies soon followed with competing all-digital proposals, ultimately resulting in a singular focus on a digital standard rather than analog.

5. *Evidentiary Record Of Non-Infringement*

a. *The '310 Patent*

The trial evidence showed that TPV's televisions do not satisfy three separate limitations of claim 7 of the '310 patent, any one of which the jury could have relied on to reject Hitachi's infringement argument. To start, claim 7 requires "a receiver which receives [a] transmitted digital signal [that] includes ... an error correction signal added commonly to both the video signal and the audio signal." A953-A954. The only correction process that is performed commonly on both the

audio and video signals under the ATSC standard and in TPV’s televisions is trellis encoding—the form of error correction that replaces two bits of data with three new bits of data, rather than adding a large packet of additional data to create redundancy, like Reed-Solomon encoding. *See supra* at 8. The expert testimony established that this process does not “add” anything to the underlying signal, but instead transforms the entering signal “into a completely different kind of a signal” that replaces the original signal with new data. A8910; *see* A8909-A8913. In other words, “[n]o error correction signal is commonly *added*” by the trellis encoder, as required by claim 7 of the ’310 patent. A8924 (emphasis added).

The record also showed that TPV televisions do not satisfy two other limitations of the '310 patent. These limitations are “a first expander which bit-expands the video signal of the digital signal corrected by the error corrector,” and a similar “second expander” for audio. A954. That is, the bit-expander must be expanding the same digital signal that was corrected by the error corrector. In TPV televisions, however, four transformative processes are performed on the signal after it exits the trellis error corrector, resulting in a completely different signal that reaches the bit-expanders. A8926. In other words, as TPV’s expert explained to the jury, “the signal that’s being bit-expanded is not the same signal that is being error corrected.” A8926.

b. *The '375 Patent*

The record also showed that TPV's televisions do not satisfy three limitations of claims 26 and 30 of the '375 patent. The '375 patent claims include "first expander" and "second expander" limitations that are nearly identical to those in the '310 patent (A10479), and were not satisfied by the TPV televisions "for the same reasons." A8949.

The third relevant limitation of the '375 patent claims requires "an error corrector configured to correct an error of the digital information demodulated by the demodulator based on the error correction information." A10479 (claim 26); *see* A10479 (materially identical language in claim 30). TPV's expert witness showed that, similar to the bit-expander limitations, the information passing from the demodulator is not the same as the information that reaches the Reed-Solomon decoder because that information is fundamentally transformed by intervening processes, this time the trellis decoder and the data de-interleaver. *See* A8933-A8934. In other words, the "digital information" that is corrected by the error corrector is not the same "digital information" that is demodulated by the demodulator.

c. *The '243 Patent*

Hitachi also accused 205 TV models of infringing claims 4 and 5 of the '243 patent, which relates to a digital broadcast receiver. The parties' dispute focused

on whether the accused products met those claims’ requirement of “a plurality of video processor sections, with respective video processor sections providing video processing according to a different video signal format.” A10499. The district court gave all the terms in this limitation their plain and ordinary meaning except for the phrase “video signal format.” The court adopted Hitachi’s proposed construction of that term, which was “number of scan lines and whether the lines are progressive or interlaced.” A49. As TPV’s expert explained, the construction meant that the claim’s limitation would be met only if an accused product contained processors that “process according to” *both* the “number of scan lines *and* whether the lines are progressive or interlaced.” A8844 (emphasis added). And, he explained, because the two processors in TPV’s televisions each perform only *one* of these processing functions—which Hitachi does not dispute, A8178; A8181—they are not infringing. A8855-A8859.

B. Jury Verdict And Post-Trial Motions

The jury determined that Hitachi had failed to prove that TPV infringed any of the asserted claims of the four patents in suit. A7846. The jury further found that TPV had shown that the asserted claims of the '310 and '375 patents were invalid based on the DigiCipher prior art. A7848. Hitachi's post-trial motions challenging that verdict were unsuccessful. A132-A154.

First, Hitachi argued that insufficient evidence supported the jury's finding that DigiCipher was prior art, because the document itself was not "publicly available" prior to July 20, 1990. The district court disagreed, highlighting evidence that GI did not treat the DigiCipher document "in a confidential manner" and had actually publicized its existence, and that by late June the DigiCipher document was shared freely with GI employees and outside contractors, and had even been submitted to the FCC and reviewed by a working party. A147. In light of that record, the district court criticized Hitachi for focusing on a single witness's inability to identify "*exactly* when the DigiCipher reference became publicly known." A146 (emphasis in original).

Second, Hitachi challenged the jury's non-infringement finding regarding the '310 and '375 patents. The district court rejected Hitachi's argument—which it never made at trial—that TPV's expert's testimony was improperly predicated on the mere presence of additional unclaimed elements and non-existent claim limitations. A137. TPV's expert Anthony Wechselberger in fact relied on specific language in the claims regarding, for example, "how each of the claimed components must be interconnected." A138. The jury's verdict was simply "a classic case of the jury believing TPV's expert witness over Hitachi's expert witness." A139.

Third, Hitachi argued that the '243 patent was infringed as a matter of law. The district court held otherwise, explaining jurors were entitled to credit TPV's expert, who "properly applied the Court's construction of 'video signal format'" in showing that a "video processor section would have to 'process the signal according to the number of lines and whether the lines are interlaced or progressive,'" not just according to one characteristic or the other, as Hitachi urged. A153-A154.

Finally, Hitachi contended that the admission of the DigiCipher document required a new trial on all the issues in the case. A9315-A9316; A9370-A9371; A9439-A9440. The court held that admission obviously was proper for the DigiCipher-based invalidity case, A145, and that Hitachi was also wrong in its complaint that TPV had tainted the infringement case by mentioning DigiCipher, A151.

SUMMARY OF ARGUMENT

The district court correctly rejected Hitachi's post-trial motions. Hitachi's appellate arguments do little more than invite this Court to supplant the jury as the body charged with resolving disputed factual issues and expert disagreements. The Court should reject that invitation.

I. It is now undisputed that the DigiCipher system embodied every limitation in the asserted claims of the '310 and '375 patents. There was also

ample record evidence establishing that in light of the DigiCipher system, the materially identical system claimed in the '310 and '375 patents was already “known by others” outside Hitachi, or “described in a printed publication,” before the patents’ effective priority date of July 20, 1990. GI employees, outside contractors, and FCC working party members had actual knowledge of the DigiCipher system by June 1990. The record also shows that GI did not place any confidentiality restrictions on DigiCipher information, thereby making it available to the interested public.

Hitachi’s appellate challenge focuses improperly on the extent of public distribution of the DigiCipher document itself. Under the “known by others” prong of § 102(a), however, GI employees’ knowledge of the DigiCipher system—knowledge concededly predating Hitachi’s effort to patent effectively the same system—is itself sufficient to satisfy §102(a), given that GI made no effort to keep the DigiCipher information secret. Hitachi thus errs in emphasizing the fact that one witness could not recall the precise date on which the DigiCipher document was publicly distributed. What matters is that the *underlying information* was known by GI employees, outside consultants, and FCC working party members, and available to other members of the interested public, before July 20, 1990. Hitachi’s remaining attacks on the jury’s verdict mischaracterize both this Court’s precedents and TPV’s arguments.

II. TPV made a thorough showing at trial that three separate limitations of each asserted claim of the '310 and '375 patents were not satisfied. Hitachi's main argument is that TPV's expert focused on elements in the TPV televisions not included in the patent claims, which Hitachi says was erroneous because its "comprising" claims can be infringed by a device that includes all the claimed elements, even if the device also includes additional elements. That argument flatly misconstrues the record. TPV's expert did not simply opine about additional unclaimed elements; he showed that whereas the claimed invention processes the same signal at particular stages in the circuit, TPV's televisions change the signal into a different signal comprising different data, and thus do not infringe the claims. In other words, the accused devices lack elements essential to the claimed inventions: interconnections that preserve the signal and its underlying data. The jury was entitled to rely on that expert evidence to reject Hitachi's infringement arguments.

III. The record also included substantial evidence establishing that the '243 patent was not infringed. The parties' dispute at trial centered on the patent's requirement of "a plurality of video processor sections, with respective video processor sections providing video processing according to a different video signal format." At Hitachi's own urging, the district court construed the term "video signal format" as the "number of scan lines *and* whether the lines are progressive

or interlaced.” A49 (emphasis added). Under that construction, as TPV’s expert explained, a “video processor section” must “process according to” *both* the number of scan lines in a signal *and* whether they are progressive or interlaced. It is undisputed that no element in TPV’s televisions takes account of both. Hitachi’s appeal merely disagrees with TPV’s expert’s opinion, but it follows fairly from the court’s construction, and jurors were entitled to find it more credible than Hitachi’s expert’s opinion.

IV. Hitachi errs in contending that if the DigiCipher system was not prior art, discussion of the system prejudiced the infringement verdicts. Hitachi complains that DigiCipher allowed TPV to suggest that Hitachi was not involved in developing the ATSC standard (it was not) and did not invent individual components of the ATSC technology (it did not). But regardless whether DigiCipher was prior art, Hitachi itself opened the door to these arguments by basing its entire infringement case on the premise that its patents are essential to the ATSC standard. And the evidence and arguments Hitachi now claims to be prejudicial nowhere rely on or refer to DigiCipher. The infringement verdicts are thus independent of the DigiCipher evidence.

STANDARD OF REVIEW

The denial of judgment as a matter of law is reviewed under regional circuit law. *Summit Tech., Inc. v. Nidek Co.*, 363 F.3d 1219, 1223 (Fed. Cir. 2004). In the

Fifth Circuit, review is de novo, using the same deferential standard the district court employed. *Int'l Ins. Co. v. RSR Corp.*, 426 F.3d 281, 296 (5th Cir. 2005). “A jury verdict must be upheld unless there is no legally sufficient evidentiary basis for a reasonable jury to find as the jury did.” *Id.* at 296-97 (quotation omitted). Reviewing courts are “bound to view the evidence and all reasonable inferences in the light most favorable to the jury’s determination,” and the jury’s “inferences may constitute sufficient proof to support a verdict.” *Hiltgen v. Sumrall*, 47 F.3d 695, 700 (5th Cir. 1995). In conducting this analysis, a court “must disregard all evidence favorable to the moving party that the jury is not required to believe.” *Reeves v. Sanderson Plumbing Prods., Inc.*, 530 U.S. 133, 151 (2000). In short, this Court should reverse “only if the evidence points so strongly and so overwhelmingly in favor of the nonmoving party that no reasonable juror could return a contrary verdict.” *Int'l Ins.*, 426 F.3d at 296.

In the Fifth Circuit, a trial court has “sound discretion” to grant or deny a motion for a new trial, and courts must affirm “absent a clear showing that this discretion has been abused.” *Whitehead v. Food Max of Miss., Inc.*, 163 F.3d 265, 269 (5th Cir. 1998) (quotations omitted). Where the district court denied a motion for new trial that challenges the sufficiency of the evidence, appellate deference is particularly pronounced: “The denial will be affirmed unless, on appeal, the [appellant] makes a clear showing of *an absolute absence of evidence to support*

the jury's verdict.” *Id.* (emphasis in original) (quotation omitted). Contrary to Hitachi’s suggestion, *see* Hitachi Br. 39, 56, 63, this standard is more demanding than the standard to reverse a denial of judgment as a matter of law, and courts need not consider the questions separately. *See Huffman v. Union Pac. R.R.*, 675 F.3d 412, 432 n.4 (5th Cir. 2012) (“Because the district court did not err in denying Union Pacific’s motion for JMOL, it therefore also did not err in denying Union Pacific’s motion for a new trial.”); *Hiltgen*, 47 F.3d at 703 (“Since we have already held that the jury’s verdict was supported by the evidence, we do not find an abuse of discretion.”).

ARGUMENT

I. THE JURY’S FINDING THAT THE ’310 AND ’375 PATENTS ARE INVALID IS SUPPORTED BY SUBSTANTIAL EVIDENCE

A patent may not be obtained for an invention that “was known or used by others in this country ... or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent.” 35 U.S.C. § 102(a) (2006). This principle is at the heart of patent law, which exists to protect—and hence encourage—*innovation* in the “useful Arts.” U.S. Const. art. I, § 8, cl. 8. Accordingly, “[i]f the invention was known to or used by others in the country before the date of the patentee’s invention, the later inventor has not contributed to the store of knowledge, and has no entitlement to a patent.” *Woodland Trust v. Flowertree Nursery, Inc.*, 148 F.3d 1368, 1370 (Fed. Cir. 1998).

Applying that core patent-law rule embodied in § 102(a), the district court instructed jurors they could find Hitachi’s claimed inventions invalid if they found that the inventions either were “known by others” or were “described in a printed publication” before July 20, 1990, the priority date of the ’310 and ’375 patents. A9197. It is now conceded that GI’s celebrated DigiCipher invention preexisted and was materially identical to the system Hitachi sought to patent as of July 20, 1990. The only question on appeal is whether there was a sufficient evidentiary basis for jurors to conclude that the system claimed in the ’310 and ’375 patents was either “known by others” or “described in a printed publication” prior to July 20, 1990. There is no serious doubt about the answer to that question. Despite Hitachi’s attempts to confuse the issues and obfuscate the record, jurors had more than enough evidence before them to conclude either (or both) that the claimed system was known by others—not least, the GI employees who developed DigiCipher and the many GI employees who were aware of it—or that it was described in a printed publication, before the priority date of the ’310 and ’375 patents.

A. GI’s Preexisting DigiCipher System Establishes That The Materially Identical System Claimed In The ’310 And ’375 Patents Was Known By Others Before July 20, 1990

Since the early days of patent law it has been understood that “prior knowledge and use by a single person” other than the inventor “is sufficient” to

render a patent invalid—the “number” of others who actually knew the invention “is immaterial.” *Coffin v. Ogden*, 85 U.S. 120, 124-25 (1873); *see Gayler v. Wilder*, 51 U.S. 477, 498 (1850). As this Court has construed § 102(a), the prior knowledge simply must have been “available to the public” to invalidate the patent. *Woodland Trust*, 148 F.3d at 1370; *see Carella v. Starlight Archery and Pro Line Co.*, 804 F.2d 135, 139 (Fed. Cir. 1986). And knowledge held by “a person other than the inventor” is considered “available to the public” so long as that person “is under no limitation, restriction or obligation of secrecy to the inventor,” *Ormco Corp. v. Align Tech. Inc.*, 463 F.3d 1299, 1305 (Fed. Cir. 2006) (quoting *Baxter Int’l, Inc. v. Cobe Labs., Inc.*, 88 F.3d 1054, 1058 (Fed. Cir. 1996)), or takes no “affirmative steps to conceal” the knowledge, *id.* (quoting 1 Donald S. Chisum, *Chisum on Patents* § 3.05[2][a] (Matthew Bender)); *cf. Aspek Eyewear, Inc. v. Concepts in Optics, Inc.*, 111 F. App’x 582, 587 (Fed. Cir. 2004) (“If the prior knowledge of Madison’s invention was kept confidential it cannot serve to anticipate the ’545 patent.”); *Woodland Trust*, 148 F.3d at 1371 (third-party knowledge that is “secret” is not available to public).

The trial record easily permitted jurors to find, by clear and convincing evidence, that the digital broadcast system claimed by Hitachi in the ’310 and ’375 patents was already known by others—many others—by the July 20, 1990 priority date of Hitachi’s patents. GI’s concededly identical DigiCipher system was fully

detailed in a GI document bearing a date of June 8, 1990. A16841. Scott Lery, an engineer hired by GI in late June of 1990 to help design and build the DigiCipher system based on that document, A8815-A8816, testified that when he arrived, the document was “readily available to anybody at GI,” A8822, and also to outside consultants such as Dr. Chris Heegard, with whom he worked, A8819.

Lery also testified that GI did not regard or treat DigiCipher as confidential. A8817-A8818. Lery explained that, in contrast to GI’s normal practice with proprietary documents, GI did not mark the document describing DigiCipher as confidential and made no other attempts to keep it secret. *Id.* To the contrary, Lery testified that when he arrived at the company, he was given a copy of a press release publicizing GI’s proposed system. A8818. That press release confirms that the DigiCipher system was not being kept secret within GI in June 1990.¹

The record also established that GI submitted the DigiCipher system to the FCC as an ATSC proposal well before July 20, 1990. Jeffrey Hamilton, Hitachi’s expert, testified that DigiCipher was “presented [to the FCC] just about when [he]

¹ TPV also sought unsuccessfully to introduce copies of three press accounts confirming that GI had publicized its DigiCipher invention. A7236; A7238-A7239; A7241-A7243. The district court did not specify the grounds on which it excluded those documents (A7455), but hearsay would not have been a legitimate basis for exclusion: the press accounts were not offered for the truth of the statements in those accounts, but to show that GI was not seeking to keep the DigiCipher system confidential. *See* A7326-A7327. This Court can consider them on that basis.

joined GI,” which was June 4th. A8333; A9107. Hamilton’s recollection was corroborated by Lery, who testified that when he joined GI in late June, “the government agency had a copy of [the DigiCipher document].” A8822. And the GI DigiCipher document itself states that it was “Submitted By” GI on “8 June 1990” (A16841), which likely refers to submission to the FCC, given Hamilton’s and Lery’s testimony.

At the FCC, the DigiCipher system was presented to a “working party” composed of numerous people outside of GI (and Hitachi), all knowledgeable and interested in the field. A8800; A8798 (describing the working parties). Hamilton’s testimony indicated that DigiCipher was presented to the outside working party by early June. A8333.

More broadly, the record showed that anyone interested in the field of digital television would have known of DigiCipher and its submission to the FCC in June 1990. The GI press releases clearly reached the interested public, as illustrated by Hamilton’s testimony, which established that he knew about DigiCipher before he joined GI. The jury even heard Hamilton admit that when he was hired in one of GI’s Pennsylvania offices, he felt that his initial assignment to build an analog set-top box was not worthwhile because he knew that the all-digital proposal out of the San Diego VideoCipher division “was going to be obviously a desirable project” to build off of. A8330-31.

Given the foregoing record, a reasonable juror certainly could conclude—indeed, would be virtually compelled to conclude—that the digital broadcast system Hitachi tried to patent as of July 20, 1990, was already known to others by that time. It was well known to GI, its employees, and its consultants, and GI did nothing to assert or maintain its confidentiality. Indeed, GI submitted it to a public agency for the purpose of evaluating whether it should become a public broadcast standard, and it was assessed by a working party comprising interested members of the public. GI’s treatment of DigiCipher was the opposite of taking “affirmative steps to conceal” the DigiCipher system. *Ormco*, 463 F.3d at 1305-06. Because the record fully supports the jurors’ finding that the invention that Hitachi tried to patent was known by others before July 20, 1990, the record likewise supports their finding that the asserted claims are invalid.

B. The Claimed Invention Also Was “Described In A Printed Publication” Before July 20, 1990

The fact that *underlying information* about the DigiCipher system was known by others outside Hitachi before July 20, 1990, suffices to invalidate the claimed patents, regardless whether the DigiCipher document itself qualifies as a “printed publication.” Hitachi’s analysis often conflates the inquiries, but they are distinct: the “known by others” issue depends on testimonial and documentary evidence concerning the availability of knowledge about the technology Hitachi tried to patent, whereas the “printed publication” issue focuses on exactly what

happened to the DigiCipher document. As with the “known by others” analysis above, the record amply supports an alternative finding that the DigiCipher document constituted a “printed publication.”

The statute does not require a document to be “published” in the usual sense of the term; rather, “public accessibility” is “the touchstone in determining whether a reference constitutes a ‘printed publication.’” *In re Klopfenstein*, 380 F.3d 1345, 1349 (Fed. Cir. 2004) (quoting *In re Hall*, 781 F.2d 897, 898-99 (Fed. Cir. 1986)). This is not a high bar: “[T]he question to be resolved in a ‘printed publication’ inquiry is the extent of the reference’s ‘accessibility to at least the pertinent part of the public, of a perceptible description of the invention, in whatever form it may have been recorded.’” *Id.* at 1348 n.2 (quoting *In re Wyer*, 655 F.2d 221, 226 (C.C.P.A. 1981)). Further, the document “need only be accessible to the *interested public*,” not the public *at large*, *Cooper Cameron Corp. v. Kvaerner Oilfield Prods., Inc.*, 291 F.3d 1317, 1324 (Fed. Cir. 2002) (emphasis added), and “there is no requirement to show that particular members of the public *actually received* the information,” *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1569 (Fed. Cir. 1988) (emphasis added); see *In re Lister*, 583 F.3d 1307, 1314 (Fed. Cir. 2009) (“once accessibility is shown, it is unnecessary to show that anyone actually inspected the reference”). Rather a document “is considered publicly accessible if it was ... made available to the extent that persons interested and ordinarily skilled

in the ... art exercising reasonable diligence [could] locate it.” *Lister*, 583 F.3d at 1314 (quotation omitted). Finally, “[v]ery little circulation or permanency is required if the work is specially directed to those skilled in the art or trade to which the patent in question relates,” 1 Donald S. Chisum, *Chisum on Patents* § 3.04[2] (Matthew Bender), because it is those skilled in the art who can use the knowledge to practice the invention or otherwise spread the knowledge more broadly throughout the public domain, *see Klopfenstein*, 380 F.3d at 1351. Accordingly, a document may be deemed publicly accessible when it is sent “direct[ly] to those whose interests make them likely to observe and remember whatever it may contain that is new and useful.” *In re Bayer*, 568 F.2d 1357, 1361 (C.C.P.A. 1978).

As set forth above, the record shows that the DigiCipher document was not treated as confidential and was provided to GI employees, outside consultants, and members of the FCC working party—all experts in the field. That evidence supports a conclusion that the document was a printed publication. In *Cooper Cameron*, this Court held that certain reports could qualify as printed publications because they “were not considered confidential and were distributed to interested parties, including outside contractors.” 291 F.3d at 1323. The papers had only been released to three joint venture members and six participants involved in the

project, and the evidence establishing that they were generally available was that the authoring entity had not designated them as confidential. *Id.* at 1323-24.

This case is materially indistinguishable from *Cooper Cameron*. GI did not designate the DigiCipher document as confidential or subject it to any other confidentiality measures, and instead distributed it to countless GI employees, and also to outside contractors such as Dr. Heegard, as well as to the FCC and to members of FCC working parties. If there is any distinction with *Cooper Cameron*, it is that here GI did *much more* to publicize the information, including announcing its existence in press releases. *See In re Wyer*, 655 F.2d 221, 227 (C.C.P.A. 1981) (“intent to make public” supports a public accessibility finding). And GI plainly succeeded in its efforts to publicize its accomplishment, as shown by the fact that Hamilton, an outsider to GI, was well aware of it.

The foregoing record easily supports a finding that the DigiCipher document, which disclosed every element of Hitachi’s claimed inventions, constituted a printed publication under § 102(a), thereby invalidating the patents.

C. Hitachi’s Contrary Arguments Lack Merit

Hitachi has no meaningful response to the evidence described above establishing that the invention claimed by the ’310 and ’375 patents was already known by others and described in a printed publication before June 20, 1990. Indeed, Hitachi ignores much of that evidence, despite its obligation to set forth the

record in the light most favorable to the verdict and to disregard all evidence in Hitachi's favor the jury was not required to believe. *See supra* at 19-20. The arguments Hitachi does advance are little more than jury arguments already rejected by the only authority to whom they are properly directed—the jury.

1. Hitachi's main argument on appeal is that one witness—Lery—"did not know and could only speculate" as to "the public accessibility of the DigiCipher document." Hitachi Br. 31. That argument fails for multiple reasons. To start, it is perfectly clear in the testimony Hitachi cites that Lery is saying only that he does not know what the legal requirements are for information to be considered "publicly known," and that he does not know the precise date on which the DigiCipher document itself was provided to the "public," whatever that term means legally:

Q. Mr. Lery ... is it true that you just don't know the exact date as to when it became publicly known?

A. Well, would—I guess *I'm not sure about what publicly known means*. It was certainly in this document. This document was known by certainly the government agency that this was submitted to—public agency it was submitted to.

... I honestly can say that, you know, it was in this document. I don't know when this document was given to the public, *so to speak*. I mean, I just know that it was readily available to anybody at GI, and the government agency had a copy of it. And as far as ... a detail like that, the error correction system, I can only, you know, speculate.

I don't really know *exactly when* people knew about—it would be more—the question would be about how many people knew about this document.

A8822 (emphasis added). It is obviously irrelevant that Lery—a fact witness—sensibly recognized that he could not speak to what constitutes the legal requirement of “public knowledge.” It is equally irrelevant that Lery could not identify the precise moment in time the document itself was “given to the public, so to speak.” As Lery himself tried to explain, what matters is not what he knew about exactly when and to whom the document itself was distributed, but that he was well aware that the *information underlying the document* was known by others—many others—when he was working at GI in June 1990.² Lery’s inability to recall the document’s exact distribution protocol also has nothing to do with his testimony that the document was not marked confidential and was freely distributed to GI employees and outside contractors (A8817-A8818)—testimony that must be accepted as credible and correct on appeal, *see infra* note 3, and which suffices to establish its public availability on this record.

² Relatedly, Hitachi complains that Lery did not identify the exact date on which the DigiCipher document was submitted to the FCC. Br. 32-33. Again, the complaint is irrelevant to Lery’s testimony about others’ knowledge of the information underlying the document. Further, given that Lery’s testimony was focused on the situation when he arrived at GI in June 1990, jurors could reasonably interpret Lery’s statement that “the government agency had a copy of it,” A8822, to mean that the FCC had a copy *before* his arrival at GI. Regardless, Hamilton independently verified that DigiCipher was “presented just about when [he] joined GI,” A8333, i.e., June 4, 1990, A9107.

Hitachi tries to make Lery’s credibility a proper subject for appeal, Br. 29, citing this Court’s observation that “[a]lthough in some circumstances *unsupported* oral testimony can be sufficient to prove prior knowledge or use, it must be regarded with suspicion and subjected to close scrutiny.” *Carella*, 804 F.2d at 138 (emphasis added). That principle has no application to Lery’s testimony concerning prior knowledge of DigiCipher for two reasons. First, Lery’s testimony was not “unsupported,” but was corroborated by, *inter alia*, the dated DigiCipher document, the press release, and Hamilton’s own admission that he was aware of DigiCipher. Second, since *Carella* this Court has explained that skepticism of even unsupported oral testimony is justified only when the witness is a named party or an employee of a named party or otherwise stands to gain personally from a prior knowledge finding. *See Thomson, S.A. v. Quixote Corp.*, 166 F.3d 1172, 1176 (Fed. Cir. 1999). Neither Lery nor any other invalidity witness called by TPV was a TPV employee or otherwise had a personal stake in the outcome here.

2. Accepting as true Lery’s disinterested, corroborated testimony about the availability of DigiCipher, Hitachi nevertheless insists that under *Northern Telecom, Inc. v. Datapoint Corp.*, 908 F.2d 931 (Fed Cir. 1990), the “known by others” standard is not satisfied by the fact that “the document ‘was readily available to anybody at GI,’ including a consultant who worked there.” Hitachi Br. 32. But *Northern Telecom*, if anything, supports *TPV*’s position. In that case, this

Court affirmed a judgment of validity and emphasized that it was deferring to the district court's factual findings that, although the documents at issue were given to 50 persons, the documents all contained notices stating that "[r]eproduction or further dissemination is not authorized ... not for public release," and that the documents were housed in a company library "restricted to persons authorized by" that company. *N. Telecom*, 908 F.2d at 936. The Court in *Cooper Cameron* subsequently emphasized the significance of the restrictive treatment, distinguishing *Northern Telecom* explicitly on the ground the documents there "were not authorized for public release and were maintained under a policy of restricted access." 291 F.3d at 1324.

As explained above, this case is like *Cooper Cameron*, not *Northern Telecom*: jurors here found as a matter of fact, on the basis of substantial evidence, that the DigiCipher information was *not* treated as confidential by GI, rejecting Hitachi's unfounded trial evidence and argument below.³

³ Reiterating a jury argument made and rejected below, Hitachi cites Hamilton's testimony that DigiCipher actually was treated as confidential and his speculation that Dr. Heegard would have signed a non-disclosure agreement. Br. 37-39. The jury was free to reject Hamilton's testimony, and this Court likewise "must disregard all evidence favorable to the moving party that the jury is not required to believe." *Reeves*, 530 U.S. at 151. And the jury indeed had good reason to disbelieve Hamilton: his testimony was flatly contradicted by Lery, a disinterested witness with direct, personal, contemporaneous knowledge of GI's practices. By contrast, Hamilton's speculation concerning the VideoCipher division's practices in June 1990 was undermined by his admission that he did not work there and had "[n]o specific information" regarding its operations. A9133.

Hitachi also erroneously relies on *ResQNet.com, Inc. v. Lansa, Inc.*, 594 F.3d 860 (Fed. Cir. 2010), for the proposition that “an absence of confidentiality markings does not mean a reference is publicly accessible.” Br. 34. Hitachi again misconstrues both this Court’s precedent and TPV’s argument. The trial court in *ResQNet* found as a matter of fact that two user manuals were not printed publications where one manual was marked “an unpublished work” and “a trade secret,” and the other had no “indiciu[m] of either publication or secrecy,” but there was no evidence that either manual had been disseminated to anyone. *ResQNet.com*, 594 F.3d at 865. This Court’s affirmance of that factual finding at most stands for the unremarkable proposition that a factfinder is not *required* to find a “printed publication” where there is almost *no* evidence of public availability, save for the absence of an explicit confidentiality marking on one of two documents. The issue here, by contrast, is not whether the jury was required to find a printed publication, but whether it was *allowed* to, on a very different testimonial and documentary record affirmatively establishing that GI treated the DigiCipher document as openly available, including (but not limited to) the fact that GI announced the DigiCipher system to the world in a press release. A8818.⁴

⁴ Hitachi questions the relevance of the press release, Br. 35, but it plainly demonstrates both that GI was not treating DigiCipher as a secret and that the interested public had access to the information, as Hamilton's own experience confirmed.

3. Finally, Hitachi levels several attacks on the evidence concerning the submission of the DigiCipher document to the FCC in June 1990. As a general matter, these attacks do nothing to undermine the verdict, which is sufficiently justified by the incontestable fact that GI did not treat the document as confidential—a fact that itself suffices to establish prior knowledge outside Hitachi, even absent the FCC submission. *See supra* at 22-26. Hitachi’s specific attacks are meritless in any event, which is doubtless why the jury rejected them. Hitachi complains that Lery did not testify that members of the general public could access the document at the FCC, Br. 33, but the FCC working party itself comprised members of the interested public, and because there was no confidentiality designation they were free to convey the information contained in the document more broadly.

Hitachi also speculates fancifully that the FCC working party members charged with evaluating DigiCipher might not have been given “the information contained in the DigiCipher document.” Br. 37. Certainly jurors were entitled to infer that an outside expert panel charged with evaluating whether DigiCipher could serve as a national broadcast standard would have been provided the relevant information about DigiCipher—just as the parties here would be entitled to infer, even absent direct evidence, that briefs filed with the Clerk were provided to the Court for review. Hitachi says *Norian Corp. v. Stryker Corp.*, 363 F.3d 1321 (Fed.

Cir. 2004), holds otherwise, but the case is completely inapposite. The issue there was whether a research abstract for a conference presentation qualified as a “printed publication,” when there was no evidence that it was actually made available at the conference. *Id.* at 1330. The issue here is whether jurors reasonably could infer that working party members charged with evaluating DigiCipher’s suitability as a broadcast standard would have received details about DigiCipher’s operation. That question answers itself.

Hitachi's reliance on *In re Lister*, 583 F.3d 1307 (Fed. Cir. 2009), is also misplaced. The Court in *Lister* held that the manuscript at issue there was not a "printed publication," even though it was available for inspection at the Copyright Office, because nobody "would have been able to learn of its existence and potential relevance prior to the critical date," given undisputed evidence that the document was not publicized in any manner or included in any index or catalog that would have guided an interested researcher to it. *Id.* at 1314-15. Again, Hitachi ignores the fact that working party members were themselves members of the interested public and experts in the field, faced with no confidentiality restrictions on the document and information being evaluated. Nor was the document and information unknown to other members of the interested public, as in *Lister*: GI employees were "jumping for joy" and the company was publicizing its ground-breaking technology in press releases in June 1990. A8818. Anybody

interested in the search for a new broadcast standard would have been aware of GI's new system, as Hamilton was. Indeed, whereas literally nobody outside the Copyright Office (other than the ostensible prior inventor) possessed the *Lister* document, numerous members of the interested public—GI employees, outside consultants, and FCC working party members—possessed the DigiCipher document or were aware of the information it contained by June 1990.

Jurors accordingly had more than sufficient grounds to find that, by virtue of the DigiCipher system, the technology Hitachi sought to patent was known by others, or was described in a printed publication, before July 20, 1990. Their verdict invalidating the asserted claims of the '310 and '375 patents must be affirmed.

II. HITACHI FAILED TO PROVE THAT TPV INFRINGED THE '310 AND '375 PATENTS

In addition to finding the asserted claims of the '310 and '375 patents invalid, the jury found that Hitachi failed to carry its burden of proving them infringed. The Court accordingly needs to reach the infringement issue only if it sustains Hitachi's sufficiency-of-the-evidence challenge to the invalidity finding. Should the Court reach the infringement issue, it should affirm the verdict, which is firmly grounded in the record evidence, most especially TPV expert testimony Hitachi has not challenged as inadmissible, and which fully supports the verdict.

Hitachi does not even acknowledge the exceedingly heavy weight of its burden in challenging the jury’s non-infringement findings. Hitachi must show that its case was established by evidence the jury was “not ... at liberty to disbelieve,” leaving infringement as the “only reasonable conclusion” jurors could have reached. *Mentor H/S, Inc. v. Med. Device Alliance, Inc.*, 244 F.3d 1365, 1375 (Fed. Cir. 2001). Hitachi comes nowhere close to making that showing. For each asserted claim, TPV responded to Hitachi’s case with admissible—indeed unchallenged—expert testimony that, if credited by the jurors over Hitachi’s competing expert testimony, established that TPV’s products do not satisfy three separate claim limitations of each patent. “It is decidedly the jury’s role to evaluate the weight to be given to the testimony of dueling qualified experts.” *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1306 (Fed. Cir. 2011); see *Kinetic Concepts, Inc. v. Smith & Nephew, Inc.*, 688 F.3d 1342, 1362 (Fed. Cir. 2012) (when parties present “conflicting expert testimony, the jury [is] free to make credibility determinations and believe the witness it considers more trustworthy” (quotation omitted)); *i4i Ltd. P’ship v. Microsoft Corp.*, 598 F.3d 831, 850 (Fed. Cir. 2010) (“Though Microsoft’s expert offered conflicting evidence ... the jury was free to disbelieve Microsoft’s expert and credit i4i’s expert”).

Indeed, Hitachi did not move before trial for summary judgment, presumably recognizing that the infringement issues here implicate routine “battle

of the experts” disputes that were not susceptible to judgment as a matter of law. Hitachi was right the first time: its brief on appeal does not and cannot show that jurors were required as a matter of law to resolve the expert disputes in Hitachi’s favor.

A. TPV’s Expert Testimony Established That Claim 7 Of The ’310 Patent Is Not Infringed

TPV’s expert Anthony Wechselberger demonstrated that the accused products did not meet three separate limitations of claim 7 of the ’310 Patent.

1. *The Accused Products Do Not “Add[]” Error Correction “Commonly To Both The Video Signal And The Audio Signal”*

a. Claim 7 of the ’310 patent requires “a receiver which receives [a] transmitted digital signal [that] includes ... an error correction signal added commonly to both the video signal and the audio signal.” A953-A954 (’310 Patent). Hitachi repeats on appeal its trial argument that this limitation is satisfied because the trellis encoder in TPV’s television “adds” an error correction signal commonly to the video and audio signals. Br. 53-55. TPV’s expert testified, and the jury agreed, that Hitachi was incorrect for a simple reason: trellis encoding does not “add” *anything* to the video or audio signals.

As Wechselberger explained, trellis encoding is a complex mathematical process that performs error correction not by *adding* data, but by *changing* the data, i.e., replacing each two-bit pair of data in the underlying signal with a three-

bit set. A8909-A8910. The pre-existing bits thus are “transformed into a completely different kind of a signal,” such that the previous underlying signal no longer exists. A8910; *see id.* (“[T]here is a complete transformation through this trellis function that takes place.”); A8913 (“the trellis encoding . . . transforms the information into something different”). In other words, “[n]o error correction signal is commonly *added*,” A8924 (emphasis added), as required by claim 7.

The trellis encoding process is fundamentally different from other error correction methods such as, for example, Reed-Solomon encoding, which arguably *does* add data to the signal, by appending to the signal a packet of redundant data, without altering that original information.⁵ Trellis encoding, by contrast, does not add data, but transforms the existing digital data into a new set of data that bears no resemblance to the original. A8912-A8913 (explaining the difference between Reed-Solomon and trellis error correction). The distinction is not unlike language translation: translating a phrase from English to Spanish fundamentally transforms the phrase without adding new information, whereas annotating the phrase for clarification adds new information.

b. Both at trial and on appeal, Hitachi has studiously ignored the gravamen of Wechselberger’s analysis, which focuses on why the transformative trellis

⁵ To be clear, the Reed-Solomon encoders still do not satisfy claim 7’s limitation because, under the ATSC standard, they do not add error correction “commonly” to the audio and video signals. Hitachi Br. 9.

encoding process does not “add” an error correction signal as required by claim 7. Hitachi’s omission is illustrated by its assertion that “Wechselberger’s acknowledgement that the signal is trellis encoded and that trellis encoding is error correction should have been the end of the matter.” Br. 55. No. What ends the matter is his showing that trellis encoding does not add to the signal but transforms it—a showing Hitachi steadfastly refuses to address.

Hitachi instead argues that Wechselberger failed to apply the relevant claim language—“an error correction signal added commonly”—because he testified only that the products do not add a “parity signal.” Br. 53-55. That contention utterly misconstrues Wechselberger’s testimony. Although he did use the phrase “parity signal,” it was obvious in context—and more to the point, a reasonable juror could infer—that he was using the phrase as a shorthand for “error correction,” and thus was applying the correct claim language. Indeed, Wechselberger’s entire testimony on this point was based explicitly on the exact language he supposedly ignored. He began by stating that “this particular claim element is talking about *an error correction signal* that’s been added to the signal.” A8923 (emphasis added). Then, as just explained, he went on to explain why trellis encoding does not “add” anything at all—not merely, as Hitachi asserts, that it does not “add a parity signal.” A8923-A8924; *see also* A8909-A8913. And in concluding, he stated that, because of the nature of trellis encoding, “[n]o error

correction signal is commonly added.” A8924 (emphasis added). To top it all off, during all of this testimony, the claim language was displayed and highlighted on a ten foot screen in the courtroom. A9522.⁶

The jury thus was entitled to credit Wechselberger’s application of the claim language to show why the accused devices do not infringe. *See Haberman v. Gerber Prods. Co.*, 236 F. App’x 592, 600 (Fed. Cir. 2007) (A “jury [is] free to apply [an expert’s] description of [undefined claim terms] if it were consistent with the jury’s understanding.”). And this Court “accords substantial deference to [the] jury’s factual application of a claim construction to the accused device in an infringement determination.” *Moba B.V. v. Diamond Automation, Inc.*, 325 F.3d 1306, 1312 (Fed. Cir. 2003). Hitachi advances no basis for overcoming that deference here, once Wechselberger’s testimony is properly characterized. And the failure of the accused devices to satisfy the “commonly added” limitation of claim 7 is alone sufficient to defeat Hitachi’s infringement argument for that claim.

2. The “Bit Expander” Limitations Are Not Met

a. TPV’s expert, however, also identified two additional grounds for finding no infringement of claim 7 of the ’310 patent, based on the two “bit expander”

⁶ Hitachi did not even suggest in cross-examination that Wechselberger applied the wrong claim language, but instead raised the point for the first time only after trial. On cross-examination, Hitachi simply asked Wechselberger to confirm, as all agree, that trellis encoding is a form of “error correction.” A9007.

limitations of the claim. These two limitations require a “first expander which bit-expands the video signal of the digital signal corrected by the error corrector,” and “a second expander which bit-expands the audio signal of the digital signal corrected by the error corrector.” A954. As Wechselberger explained, the signal that is expanded by the bit-expanders in TPV’s televisions is not “*the* video [or audio] signal of *the* digital signal corrected by the error corrector,” as the claim requires. Rather, because of processes performed between the error corrector and the bit-expander, the TPV expander bit-expands a signal that is *different* from “the signal” sent out by the error corrector. *See Warner-Lambert Co. v. Apotex Corp.*, 316 F.3d 1348, 1356 (Fed. Cir. 2003) (“it is a rule of law well established that the definite article ‘the’ particularizes the subject which it precedes” (quotation omitted)).

Wechselberger testified that, in TPV’s televisions, the signal processed by the trellis decoder undergoes four transformative steps after it is error-corrected. Specifically, the signal is processed and altered by a data de-interleaver, a Reed-Solomon decoder, a data de-randomizer, and a de-multiplexer. A8926. Each of these devices significantly reorders and alters the information and signal present at each successive stage of the reception process. *Id.*; *see also* A8911-A8913 (explaining the mechanics of each of these processes). Only then is the data received by the bit-expander, but by then it has been transformed into a signal

different from the signal processed by the trellis encoder. A8926 (“the signal that’s being bit-expanded is not the same signal that is being error corrected”). The expander thus does not bit-expand “*the* digital signal corrected by the error corrector,” as the claim requires.

To further demonstrate the lack of infringement, Wechselberger testified that if the bit-expanders *did* operate on the same signal output by the trellis decoder, none of the accused products could function. A8927. As he explained, the intervening processing steps—which transform the existing digital signal into a new signal—are essential to the ATSC standard, A8926-A8927, and thus the claim language requires the error corrector and expanders to work together in a way that simply will not function for digital televisions under the ATSC standard, though it may support other or simpler applications such as VTRs, which is the embodiment addressed explicitly in the ’310 patent. A954. Indeed, in the VTR system described in the patent, there are *no* intervening processes—much less four processes that each create a new signal—between the error correction and bit expansion elements. A930.⁷

⁷ The fact that Hitachi’s patents directed at VTRs do not comply with the ATSC standard for digital televisions should not be surprising: Hitachi played absolutely no role in developing the ATSC standard. A8895-A8896. And after the ATSC standard was adopted, Hitachi did not attempt to have its patents declared essential to the standard, A8046, even though such a declaration would likely have aided its attempts to secure licenses from companies like TPV, and several other companies that were not involved in the ATSC process did so. A9013-A9014.

b. On appeal Hitachi argues that Wechselberger’s testimony does not support the jury’s non-infringement finding because he relied solely on the presence of “unclaimed elements” in TPV’s televisions. Br. 45-48. Hitachi is wrong. As just explained, Wechselberger did not testify that the mere existence of the de-interleaver, Reed-Solomon decoder, de-randomizer, and de-multiplexer elements in TPV’s televisions is what defeated infringement. His point, rather, was that those intervening process operate to change “the signal” that is present at each stage, resulting in a signal at the bit-expander that is *not* “the signal” that exits the trellis decoder, as required by the claim language. Hitachi might be correct, for example, as to a different device that included other elements between the error-corrector and the bit-expander—elements that did not operate to change the signal. But the elements here *do* change the signal, which is why they do not satisfy the claims, which require the same signal throughout the process.

Hitachi's contrary argument ignores that limitation on how the trellis decoder and bit-expanders must work together. Throughout its infringement argument (and not just for the '310 patent, but for all asserted claims), Hitachi proceeds as if the patent simply recites "a bit expander," then "an error corrector," and so on. *E.g.*, Br. 44-45 ("Wechselberger's testimony alone was sufficient" to prove infringement simply because he agreed the accused products "contain tuners, demodulators, Reed-Solomon decoders, trellis decoders, and video and audio

expanders”); *id.* at 49 (claim “simply recite[s] the order in which the recited elements process the signal”). But the patent does not merely claim a particular series of otherwise unconnected processing elements. To the contrary, it claims a *particular type* of bit-expander, i.e., one that “bit-expands *the* video signal of *the* digital signal corrected by the error corrector.” The ability of the expander to bit-expand the same signal corrected by the error corrector is thus the essence of the claim. And proving “[i]nfringement requires the patentee to show that the accused device contains or performs each limitation of the asserted claim.” *Moba*, 325 F.3d at 1313. Hitachi thus cannot assert infringement by simply identifying the presence of certain similar components in TPV’s televisions—it must show in particular that TPV’s bit-expander can and does operate on the same signal that exits the error corrector.⁸ Hitachi does not even attempt to make that showing.

Hitachi may be proceeding on the unstated assumption that a digital signal, no matter how substantially transformed by intervening operations, always remains the same digital signal so long as it can ultimately represent the same picture or sound. But Hitachi adduced no testimony or other evidence to that effect, and on its face it is not the most reasonable application of the language, much less the *only*

⁸ Even Hitachi’s expert agreed that, because Hitachi did not invent the individual components that comprise the claim, any innovation reflected in the patent lies in how those components operate together, and therefore that “the jury should look very carefully at the claim language as to how [the components are] combined together.” A9126.

reasonable one. A reasonable juror easily could conclude TPV’s four intervening processes so transformed the signal that was corrected by the trellis decoder that it was no longer the same signal, just as Wechselberger testified. And if Hitachi desired a different definition of “the [video/audio] signal,” Hitachi “could (and should) have sought a construction to that effect” below. *ePlus, Inc. v. Lawson Software, Inc.*, 700 F.3d 509, 520 (Fed. Cir. 2012). Because it failed to do so, “the jury was free to rely on the plain and ordinary meaning” of the claim terms as applied by Wechselberger. *Id.*; see *Haberman*, 236 F. App’x at 600 (“the jury was free to apply [an expert’s] description of [undefined claim terms] if it were consistent with the jury’s understanding”); A9182-A9183 (jury instruction below: for undefined claim terms, “you should apply their plain and ordinary meaning as they would be understood by a person of ordinary skill in the art”).

B. TPV's Expert Testimony Established That Claims 26 And 30 of The '375 Patent Are Not Infringed

TPV also demonstrated that the accused products do not meet three limitations in each of claims 26 and 30 of the '375 patent. To begin, the '375 patent contains “first expander” and “second expander” limitations that are nearly identical to those in the '310 patent. The only difference is that claim 26 requires bit expansion of “the video information of the digital information error corrected,” and claim 30 requires expansion of “the video information of a digital information which is previously error corrected,” instead of “the video signal of the digital

signal.” A10479. (Each claim also requires a second expander of “audio information.” *Id.*) Wechselberger explained that the slight variation in language from the ’310 patent is immaterial, and that the two-bit expansion elements of claims 26 and 30 are not met “for the same reasons that I explained with respect to the ’310 patent” (A8949), i.e., the information is transformed by intervening processes after being error-corrected, and thus the information that is bit-expanded is not the same information that was error-corrected, as the claims require. A8949 (claim 26); A8951-A8952 (Claim 30).

Wechselberger presented a similar analysis of a third limitation of claims 26 and 30 of the ’375 patent. That limitation requires “an error corrector configured to correct an error of the digital information demodulated by the demodulator.” A10479 (claim 26); *see* A10479 (Claim 30: requires “an error corrector configured to correct an error of a digital information which is previously demodulated by the demodulator”).

As it did below, Hitachi insists (Br. 49) that the Reed-Solomon decoder satisfies this limitation, i.e., that it “correct[s] an error of the digital information [or a digital information] demodulated by the demodulator.” But Wechselberger testified that the information passing from the de-modulator is *not* the same information that reaches the Reed-Solomon decoder, because the information is transformed by intervening processes, this time the trellis decoder and the data de-

interleaver. *See* A8933-A8935. Indeed, because of the unique nature of trellis decoding, the “information” exiting the demodulator is of a completely different nature than the “information” reaching the Reed-Solomon decoder, as the trellis decoder changes the information from being represented as “symbols” back into “bit” form. A8935. And once again, if the information entering the Reed-Solomon decoder were the same as the information exiting the demodulator, as the patent requires under Wechselberger’s application of the claim language, the televisions “would not work.” A8935.

Hitachi’s response is similar to its argument concerning claim 7 of the ’310 patent. In Hitachi’s view, the claims simply recite an order in which certain claimed processing steps must occur, relying on the language of claim 30 (and ignoring claim 26), which requires “an error corrector configured to correct an error of a digital information *which is previously demodulated* by the demodulator.” Br. 50 (emphasis in original). Hitachi says the italicized words prove that the information need not be the same information previously demodulated, but those words make no difference under Wechselberger’s testimony. Just like claim 26’s reference to “the digital information demodulated,” claim 30’s reference to “a digital information which is previously demodulated” speaks to a particular type of “digital information,” *viz.*, information that was “previously demodulated.” If the “digital information” which reaches the error

corrector is not the same as the information that is demodulated, then *that information* is not “information which [was] previously demodulated by the demodulator,” and the claim is not infringed. Thus, the jury was entitled to rely on Wechselberger’s testimony that claim 30 “has all the same requirements” as claim 26, despite minor wording differences. A8951.

Hitachi also asserts that “Wechselberger offered no testimony (nor could he) that additional processing components modify the digital ‘information’ (i.e., the content) represented by the digital signal.” Hitachi Br. 51. Hitachi is playing word-games, based on the fact that Wechselberger used the word “signal” rather than “information” in explaining why the demodulator limitations are not infringed. A8933-A8936; A8934 (“And so we find two stages of signal processing, each of which changes the signal”). In context, Wechselberger’s point was perfectly clear. He had just explained to the jury at length that claim 7 of the ’310 patent was not infringed because the “signal” corrected by the error corrector is not the same “signal” that reaches the bit expanders. TPV’s lawyer then turned to claim 26 of the ’375 patent, quoting the relevant language, including the correct term “information.” A8933. Wechselberger then applied the analysis he had used for claim 7 (with its “signal” language) to claim 26 (with its materially identical “information” language). A8933-A8936; *see* A8951 (testimony regarding claim 30). No reasonable juror would have been confused about his analysis merely

because of his stray reference to “signal” rather than “information.” And any reasonable juror was entitled to rely on that analysis to find that claims 26 and 30 of the ’375 patent were not infringed.

III. HITACHI FAILED TO PROVE THAT TPV INFRINGED THE '243 PATENT

Hitachi also challenges the jury’s factual finding that Hitachi failed to prove infringement of claims 4 and 5 of the ’243 patent, both of which depend from claim 1. The ’243 patent, in general terms, describes a digital receiver that can isolate and process multiple differently-formatted video signals from a single transmitted stream. The parties’ dispute at trial centered on claim 1’s requirement of “a plurality of video processor sections, with respective video processor sections providing video processing according to a different video signal format.” A10499. The district court gave all the terms in this limitation their plain and ordinary meaning, except for the term “video signal format,” which it construed—as urged by *Hitachi*—to mean the “number of scan lines *and* whether the lines are progressive or interlaced.” A49 (emphasis added). Thus, to be a “video processor section” for purposes of the claim, an accused device must provide “processing according to [the number of scan lines and whether the lines are progressive or interlaced],” and the patent requires at least two such devices.

As the district court ruled, the parties presented competing applications of its claim construction, and the jury was entitled to adopt TPV's. A153-154. Hitachi

argued that under the court’s construction, a “video processor section” need only provide processing according to *either* the number of lines *or* their progressive/interlaced nature. TPV, by contrast, argued that a “video processor section” must provide processing according to *both* the number of lines *and* their progressive/interlaced nature. As TPV’s expert Dr. Reader explained to the jury, TPV’s theory followed directly from the court’s construction of “video signal formats” as “number of scan lines *and* whether the lines are interlaced,” which should mean for the whole claim exactly what the word “and” implies, *viz.*, that to be a “video processor section” as defined in the claim, a device must process according to *both* characteristics. A8844.

It is undisputed that TPV’s products do not infringe under TPV’s application of the court’s conjunctive construction. Hitachi argues that TPV’s televisions infringe as a matter of law because they “all have a scaler and a deinterlacer that process the video signal.” Br. 56. But the “scaler” is designed to alter only the number of scan lines in a received signal when that signal contains a different number of lines than the television’s display. A8856 (“The scaler has nothing to do with whether the lines are progressive or interlaced. It literally doesn’t care. It doesn’t process according to whether the lines are progressive or interlaced.”). And the “de-interlacer” converts signals that are in an interlaced format into a progressive format; it does not account in any fashion for the number of lines in a

signal. A8857-A8858. Thus, under Dr. Reader’s application of the court’s construction, “neither the scaler taken alone nor the de-interlacer taken alone can meet the Court’s construction of what a video processor section must be.” A8855.

The jury’s endorsement of that analysis is controlling. Because “the task of determining whether the construed claim reads on the accused product is for the finder of fact,” *PPG Indus. v. Guardian Indus. Corp.*, 156 F.3d 1351, 1355 (Fed. Cir. 1998), this Court “accords substantial deference to a jury’s factual application of a claim construction to the accused device in an infringement determination,” *Moba*, 325 F.3d at 1312.

Hitachi responds that Reader’s testimony impermissibly rests on limitations not present in the claims. Br. 56. It does not. As discussed, Reader instead relies on the court’s conjunctive construction of “video signal formats”—a construction Hitachi does not even acknowledge until the end of its argument. Br. 60. Try as it might, Hitachi cannot ignore the word “and” out of existence, or change it to the word “or,” as Hitachi’s theory would require. *Cf. Suprema, Inc. v. Int’l Trade Comm’n*, 742 F.3d 1350, 1370 (Fed. Cir. 2013) (appellant’s “position is a stretch—it really seems to be unhappy with the construction it proposed and to be asking for something directly at odds with that original construction”).

When Hitachi finally does acknowledge the court’s construction of “video signal format,” its primary argument relies on ignoring *other* claim language.

Specifically, Hitachi suggests that “[t]he nature of the processing that is done by the video processor sections is not specified by the claim.” Br. 61. Yes, it is: the claim explicitly specifies that processing be performed “*according to a ... video signal format.*” A10499 (emphasis added). The “video signal format” thus dictates the nature of the processing to be done. And that phrase, as the court construed it, includes two characteristics: the number of lines *and* their progressive/interlaced nature. The processing accordingly must encompass each characteristic.

Hitachi tries to avoid this result by denying that the words “according to” prescribe the type of processing that must occur. Br. 58, 60-61. But a command that a process be performed according to two characteristics means that it must be done, for lack of a better phrase, *according to both characteristics*: an employer who promises to pay an employee according to the quality and quantity of her work must consider both factors, not just one.⁹

Finally, Hitachi asserts that Reader’s testimony was inconsistent with the court’s description of “processing,” because the court rejected TPV’s preferred construction of “processing,” which would have excluded scaling or de-interlacing.

⁹Hitachi also suggests at one point that the claim requires only that a different “video processor section” be “selected” based on the video format of an incoming signal, Hitachi Br. 61, but the claim language says no such thing: it instead states clearly that each video processor section must “process” according to both features.

Br. 62. Even if scaling is a type of “processing,” however, that does not mean scaling *standing alone* is the “processing” the claim requires, i.e., processing according to the number of scan lines *and* whether they are progressive or interlaced. Indeed, a particular section that performed both de-interlacing and scaling would qualify as a “video processor section,” whereas it would not if TPV had secured its construction of “processing.”

In the end, Hitachi’s argument on appeal founders on the same shoal—the single word “and”—that doomed its trial argument. A reasonable juror hardly would have needed to hear TPV’s expert to understand that the word means what it says, and thereby justifies a non-infringement finding.

IV. EVEN IF THE DIGICIPHER REFERENCE IS NOT PRIOR ART, HITACHI IS NOT ENTITLED TO A NEW TRIAL

Hitachi's brief concludes with a last-ditch attempt to secure a new trial on infringement of all four patents it asserted at trial. According to Hitachi, if the Court concludes that jurors acted unreasonably in finding the DigiCipher system to be prior art, then evidence concerning DigiCipher was not properly admitted, and the erroneous admission prejudiced Hitachi's infringement case. Hitachi is incorrect.

In the Fifth Circuit, an erroneous evidentiary ruling warrants reversal only if “it affects a substantial right of the complaining party,” *Polythane Systems, Inc. v. Marina Ventures Int’l, Ltd.*, 993 F.2d 1201, 1208 (5th Cir. 1993), which requires

the appellant to show that the error “affected the outcome of the proceedings,” *United States v. Ramirez-Velazquez*, 322 F.3d 868, 879 (5th Cir. 2003); *see Stitt Spark Plug Co. v. Champion Spark Plug Co.*, 840 F.2d 1253, 1259 (5th Cir. 1988) (party’s “substantial rights” not affected because evidentiary ruling had not “altered the result in th[e] case”).¹⁰

Preliminarily, as discussed throughout this brief, Hitachi’s infringement case was anything *but* “overwhelming.” Hitachi Br. 64. For every asserted claim, TPV introduced credible, admissible expert testimony contradicting Hitachi’s infringement theory—testimony the jury obviously chose to credit. And neither DigiCipher nor the more specific arguments Hitachi complains of were connected in any way to the claim analyses presented by TPV’s experts and adopted by the jury. For purposes of the infringement issues, Hitachi’s objection to the DigiCipher evidence is a red herring.

¹⁰ Hitachi thus errs in asserting that it need not show that “the trial would have turned out differently” absent the DigiCipher evidence. Br. 63.

Hitachi also erroneously relies on *Pryer v. C.O. 3 Slavic*, 251 F.3d 448, 455 (3d Cir. 2001), to suggest that the jury’s infringement findings must be overturned unless “it is plain” that the admission of DigiCipher “did not in any way affect the determination of any other issue.” Br. 67-68. That case, and the others Hitachi cites, involves the distinct subject of whether issues in a case are separable when a new trial is needed on one issue; the standard is so demanding because partial new trials are strongly disfavored. *See Pryer*, 251 F.3d at 455; *accord Anderson v. Siemens Corp.*, 335 F.3d 466, 475-76 (5th Cir. 2003).

Hitachi's more specific complaints about how DigiCipher became implicated in the infringement case prove the point. Hitachi's central argument is that DigiCipher was "key" to two infringement-related arguments TPV made to the jury. The first was that Hitachi was not involved in the development of the ATSC standard; the second was that Hitachi did not invent the individual components that make up the accused products. Br. 65-67. Hitachi's premise is wrong: Hitachi *itself* opened the door to these arguments, and more importantly, TPV could have pursued them even without DigiCipher.

At trial, Hitachi founded its entire infringement case regarding the '310 and '375 patents on the dubious premise that those patents are essential to the ATSC standard, and thus were infringed almost per se by TPV's ATSC-compliant televisions. During direct examination of its first witness, Hitachi highlighted a letter it sent to TPV's CEO demanding TPV agree to a license because "it has come to our attention that you have been ... selling ATSC-compliant TV products to and for use in the U.S." A7979-A7980 (Matsuo). Throughout trial and into post-trial motions, Hitachi continually emphasized that "infringement was predicated on compliance with the ATSC standard." A9671; *see* A8645 (Hitachi's damages expert: "anybody who makes or sells a digital TV in the U.S. that's compliant with the ATSC standard infringes these patents if they don't have a license"). It was thus Hitachi itself, not TPV or the DigiCipher document, that

opened the door to TPV's evidence and arguments that jurors should not consider Hitachi's patents essential to the ATSC standard, in part because Hitachi was never involved in developing that standard.

Even if Hitachi had not opened the door on that issue, its true objection—that DigiCipher was “key” to TPV's narrative, Br. 66—is simply wrong. DigiCipher was relevant to development of the ATSC standard because DigiCipher sparked the turn towards all-digital systems (A7922), but what Hitachi now complains about are TPV's trial arguments that Hitachi was not involved in the Grand Alliance or the ATSC process generally. Those arguments did not depend on DigiCipher in any way. Indeed, in the section of TPV's opening argument that Hitachi highlights to show prejudice, DigiCipher is nowhere to be found. Hitachi Br. 65; A7923-A7925. The document publishing the ATSC standard similarly tells the story of its development without discussing DigiCipher. A11087-A11088. In short, DigiCipher played no part in the arguments that Hitachi does not like—Hitachi brought those arguments upon itself, and it would have suffered them even absent DigiCipher.

Hitachi's complaints about testimony that Hitachi did not invent various elements in the accused products (Br. 66-67) are even more disconnected from the admission of DigiCipher. It is wholly *undisputed* that Hitachi did not invent demodulators, trellis decoders, error correction, or de-interleavers. A9125-A9126.

Absent DigiCipher, any of several witnesses would have established that Hitachi did not invent those devices, just as plenty of witnesses would have established that Hitachi had nothing to do with the ATSC process.

Hitachi’s other attempts to show prejudice connected to DigiCipher are sheer makeweight. Hitachi notes that the jury requested the DigiCipher document during deliberations, Br. 64, but there is no surprise in that: the document was central to the prior art issue. A151 (trial court: “the jury’s request to see the DigiCipher exhibit during deliberations is not indicative of confusion, but rather is a wholly foreseeable result of TPV’s focus on Digicipher during its case-in-chief” regarding validity). Hitachi’s outlandish speculation that jurors were instead interested in its connection to the infringement issue is just that: outlandish speculation. It is equally implausible that TPV’s brief mention of DigiCipher during its cross-examination of Hitachi’s infringement expert caused jurors to ignore days of expert testimony on the merits of Hitachi’s infringement case. Hitachi Br. 67. As the court below recognized in real time, TPV did not “take[] any improper steps” in displaying the DigiCipher reference, A8353, and thereafter TPV complied with the court’s instruction to save further inquiry regarding DigiCipher for its invalidity case.

There is, in sum, no likelihood whatsoever that admission of the DigiCipher document affected the outcome of the infringement case.

CONCLUSION

For the foregoing reasons, the judgment should be affirmed.

Dated: April 14, 2014

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on this 14th day of April, 2014, a true and complete copy of the foregoing BRIEF OF DEFENDANTS-APPELLEES was served on counsel for appellant Hitachi Consumer Electronics by electronic means (by CM/ECF).

Dated: April 14, 2014

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CERTIFICATE OF COMPLIANCE

1. This brief complies with the type-volume limitations of Fed. R. App. P. 32(a)(7)(B) because this brief contains 13,969 words, excluding the parts of the brief exempted by Fed. R. App. P. 32(a)(7)(B)(iii) and Federal Circuit Rule 32(b).
2. This brief complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type style requirements of Fed. R. App. P. 32(a)(6) because this brief has been prepared in a proportionally spaced typeface using Microsoft Word 2010 in Times New Roman 14-point font.

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